IN THE CLAIMS

Please amend the claims as follows:

- 1. (Amended) [Process] A process for the production of an electrochromic coating on a substrate by cathode sputtering of a target in a coating atmosphere containing a noble gas, in particular argon, and hydrogen ions, [characterized in that] wherein at least one gaseous hydrocarbon is added to the coating atmosphere.
- 2. (Amended) [Process] A/process according to claim 1, [characterized in that] wherein said at least one gaseous [saturated] hydrocarbon is a saturated hydrocarbon [added to the coating atmosphere].
- 3. [Process] A process according to claim 2, [characterized in that] wherein [methane is used as] said saturated hydrocarbon is methane.
- 4. [Process] A process according to claim 2, [characterized in that] wherein said saturated hydrocarbon is selected from the group consisting of ethane, propane [or] and butane [is used as hydrocarbon].

- 5. [Process] A process according to [one of claims 1 to 4, characterized in that] claim 1, wherein oxygen is additionally added to the coating atmosphere.
- 6. (Amended) [Process] A process according to claim 5,

 [characterized in that] wherein the volumetric ratio of added hydrocarbon to added oxygen is in the range 3:1 to 1:3, in particular approximately 1:1.
- 7. (Amended) [Process] A process according to claim 5 [or 6], [characterized in that] wherein the volumetric ratio of noble gas, in particular argon, to oxygen is in the range of 3:1 to 1:3, in particular approximately 1:1.
- 8. (Amended) [Process] A process according to [one of claims 1 to 7, characterized in that] claim 1, wherein operation takes place at a total pressure of the coating atmosphere of $0.3 \cdot 10^{-2}$ mbar to 10^{-1} mbar, in particular of $1 \cdot 10^{-2}$ mbar to $4 \cdot 10^{-2}$ mbar.
- 9. (Amended) [Process] A process according to [one of claims 1 to 8, characterized in that] claim 1, wherein a target consisting of tungsten or of a tungsten alloy is used.

- 10. (Amended) [Process] A process according to [one of claims 1 to 9, characterized in that] claim 1, wherein a target containing molybdenum, titanium, cerium, vanadium and/or zirconium is used.
- 11. (Amended) [Process] A process according to [one of claims 1 to 10, characterized in that] claim 1, wherein the electrochromic coating (16, 20) is applied with a thickness in the range of 50 nm to 500 nm.
- 12. (Amended) [Electrochromic] An electrochromic element with at least one electrochromic coating (16, 20) which has been produced in accordance with the [according to a] process [according to one of the foregoing claims] of claim 1.
- 13. (Amended) [Electrochromic] An electrochromic element according to claim 12, [characterized in that] wherein Li⁺ ions are used as charge carriers.